



Foreign Comparative Testing (FCT) Program Overview April 2017

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The FCT Program Mission



To Find, Assess and Field World-Class Technologies to Enhance Military Capabilities and Provide Long-Term Value

Technologies should present:

- Significant cost savings resulting in positive ROI
- Significant performance enhancements
- Novel approaches

Office of the Secretary of Defense (OSD) Selects & Funds Projects

U.S. Military Services Execute Testing

U.S. Military Services are responsible for procurement



Measuring Progress

OSD Investment: \$1.30 Billion *(constant FY16 \$)*

- Led to nearly 300 procurements worth over \$11B
- Has accelerated the fielding of equipment by an average of 3 years
- The FCT Program Offices review hundreds of technologies each year

Mutual Benefits

- Strengthens Ties with our Foreign Allies
- Connects Foreign Technologies to U.S. DoD Development & Acquisition Programs
- Enhances the U.S. Industrial Base
- Foreign Vendor Teaming across 34 States

Typical Project Scope

- OSD funds 10-12 new projects/year
- TRL 7 is the average for all active Projects
- \$600K – \$900K per year with a 2-yr duration



The FCT Program Process

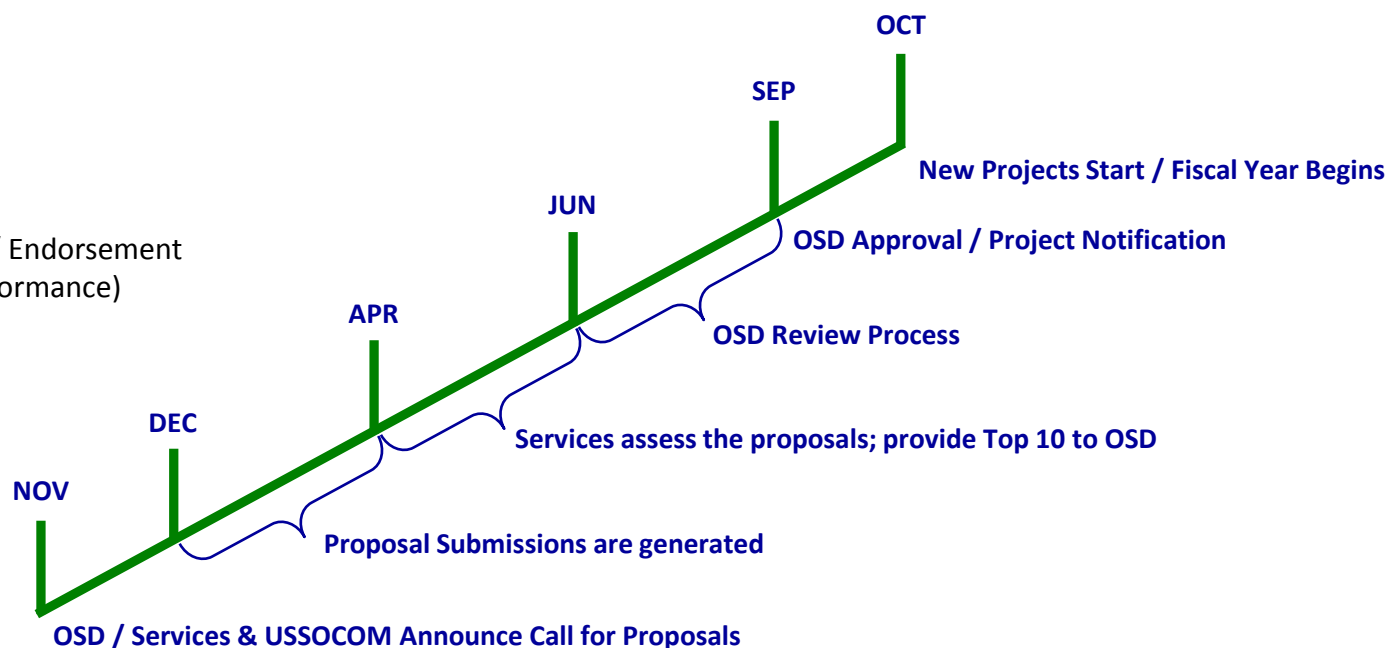
Selection Considerations:

Top Down

- OSD Focus Areas / Priorities
- Joint Application
- Long Term Value
- Cost Avoidance

Bottom-Up

- Mission Need
- Procurement Strategy
- Program Office Support / Endorsement
- Risk (Cost/Schedule/Performance)



We actively collect and share product / technology information throughout the year



FCT Evaluation Options

**Developmental
Prototype
(TRL 6)**



**Operational
Prototype
(TRL 7)**



**Qualification Test
(TRL 8-9)**



Assessment

**Transition /
Procurement
(if successful)**

FCT projects can be side-by-side Comparative Evaluations



Current FCT Focus Areas



Asymmetric Force Application

Asymmetric force application is the use of nontraditional technologies, tactics, and weapons to provide a clear military advantage to our forces during maneuver and engagement operations.

Autonomous Systems

Autonomous systems are a "capability (or a set of capabilities) that enables a particular action of a system to be automatic or, within programmed boundaries, 'self-governing'". Autonomous systems can improve our capability without increasing capacity by better coordinating and synchronizing current sensors and weapon systems and by maximizing the efficiency of both.

Electromagnetic Spectrum Agility

The increasingly wireless nature of the global economy, coupled with advances in analog-to-digital conversion, cognitive radios, smart antennas, and increased transmitter-receiver diversity, present opportunities to develop new capabilities that sustain and extend our military advantage in the EMS domain. These new capabilities will also mitigate the impact of new challenges, including an increasingly cluttered operational EMS environment.

Information Operations and Analytics

Exploit commercial technology advancements in information collection and management to provide the Joint Force enhanced communications and Situational Awareness within their Area of Responsibility to disrupt and delay adversary forces from offensive operations, counter their ability to use deceptive messaging to influence U.S. / Coalition operations and develop capabilities to counter adversary cyber and C2 communications.



Participating in the FCT Program



Meeting with the OSD Comparative Technology Office or Service Program Offices:

- Conferences and Trade Shows (CONUS & OCONUS)
- Embassy Hosted Industry Days in Washington, D.C.
- In-Country Hosted Industry Days

Submit a completed Product Template

To get more info please contact:

- Your Embassy in D.C. – Defense Attaché , Trade or S&T Organization
- The Security Cooperation Office / Attachés within the U.S. Embassy in your Country
- OSD FCT Website: <https://cto.acqcenter.com>
- One of the Service Program Office Leads

Help us understand how your product / technology is better, cheaper, novel



Product Template



- **Product Name**
- **Company Name**
- **Country**
- **Knowledgeable POC / Website**
- **Technology Description**
- **Current Technology Readiness Level**
- **Countries using the Technology?**
- **The Application (*the so what?*)**
- **The Science**
- **The Supporting Data**
- **Any U.S. Partners?**
- **Any previous work with the DoD?**

OSD Foreign Comparative Test – Product Template

Product: XX mm High Velocity (HV) Airburst Munitions System (ABMS)

Company Name: Advanced Systems (AS)

Country: Republic of Antarctica

Point of Contact: Mr. Jones

Phone: (555) 555-5555

Website: www.abcd.com

Email: abcd@abcd.com



Short Description: The HV ABMS consists of a Fire Control System, an Ammunition Programmer and XX x XX mm Air Burst Munitions. High explosive, Flash and Bang, Counter defilade, increased lethality, improved accuracy.

Technology Readiness Level (fielded, lab tested, operational test): TRL: 9 The HV ABMS is qualified and in production.

Countries using the technology: Madagascar, Dominican Republic, Greenland, etc.

Application: (the so what?) The HV ABM is specially designed to allow soldiers to effectively engage enemies in defilade and to provide improved accuracy and higher lethality through a technologically improved muzzle velocity compensation capability.

Science (how it works): Muzzle velocity compensation for the immediate round fired. The 40mm HV ABMS is an upgrade kit to existing launchers to provide Air Bursting Precision capability. The FCS accurately lazes the target and the ballistic card computes the time to burst. The computed time to burst based on the measured velocity is programmed into the fuze only upon exit at the ammunition programmer. Enhanced safety with its built-in self-destruct mode and gives ABM the ability to function as a point detonating HE cartridge as well as an Air-Burst cartridge.

Data:

- Grenade Length: XX mm • Weight : XXX gm
- Muzzle Velocity : XXX m/s • Maximum Range: XXXX m
- Lethal Radius : X m • Arming Distance : XX to XX m
- Fuze Type : Programmable Time Fuze

U.S. Partner: AS does not currently have a relationship with a US company.

Previous work with DoD: Technology developed through US DoD laboratory funding.



Key Points of Contact



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